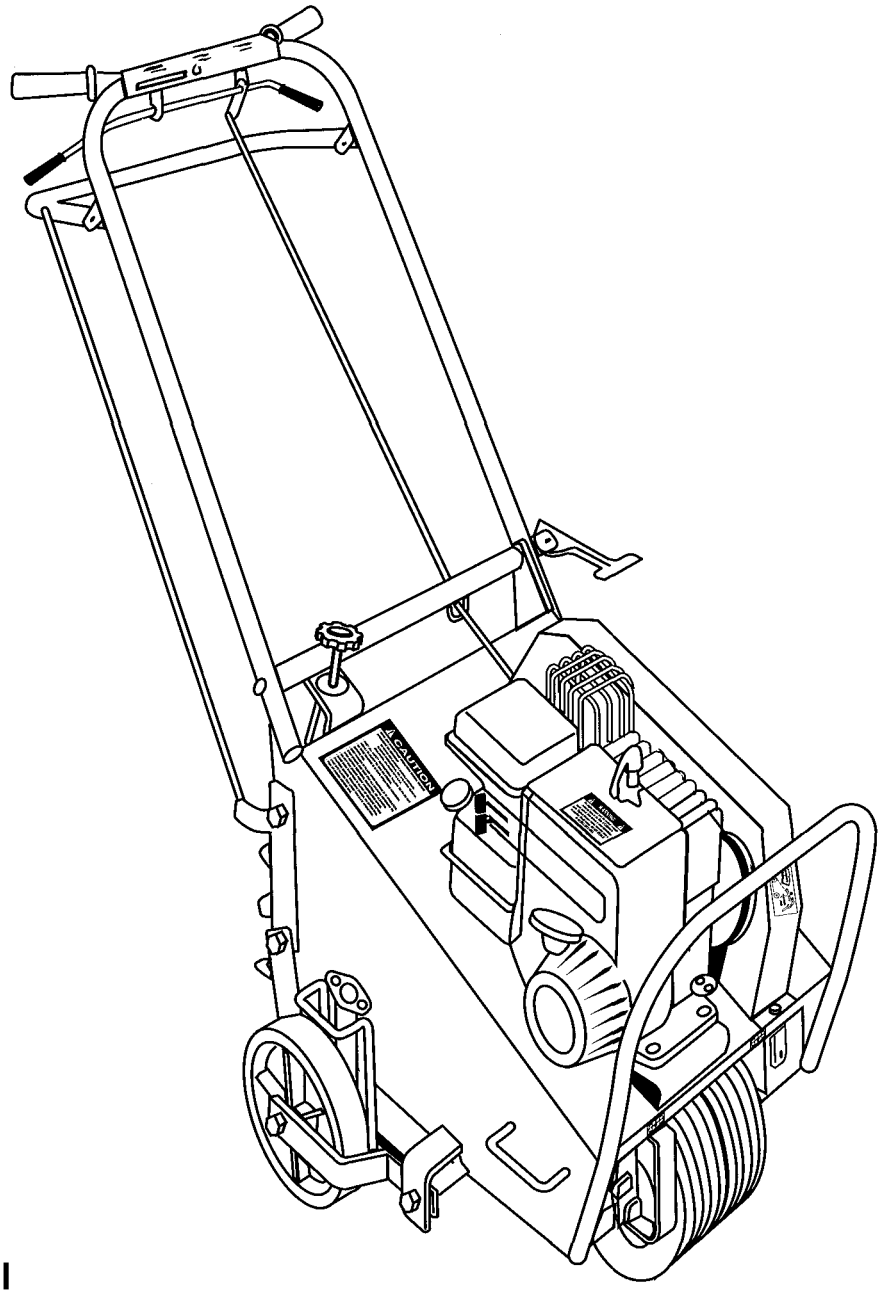
FORM NO. 3319-510

TORO®

Lawn Aerators

Models

62063 AERATOR 244 : 790101 & up
62064 AERATOR 442 : 790101 & up



Operator's Manual

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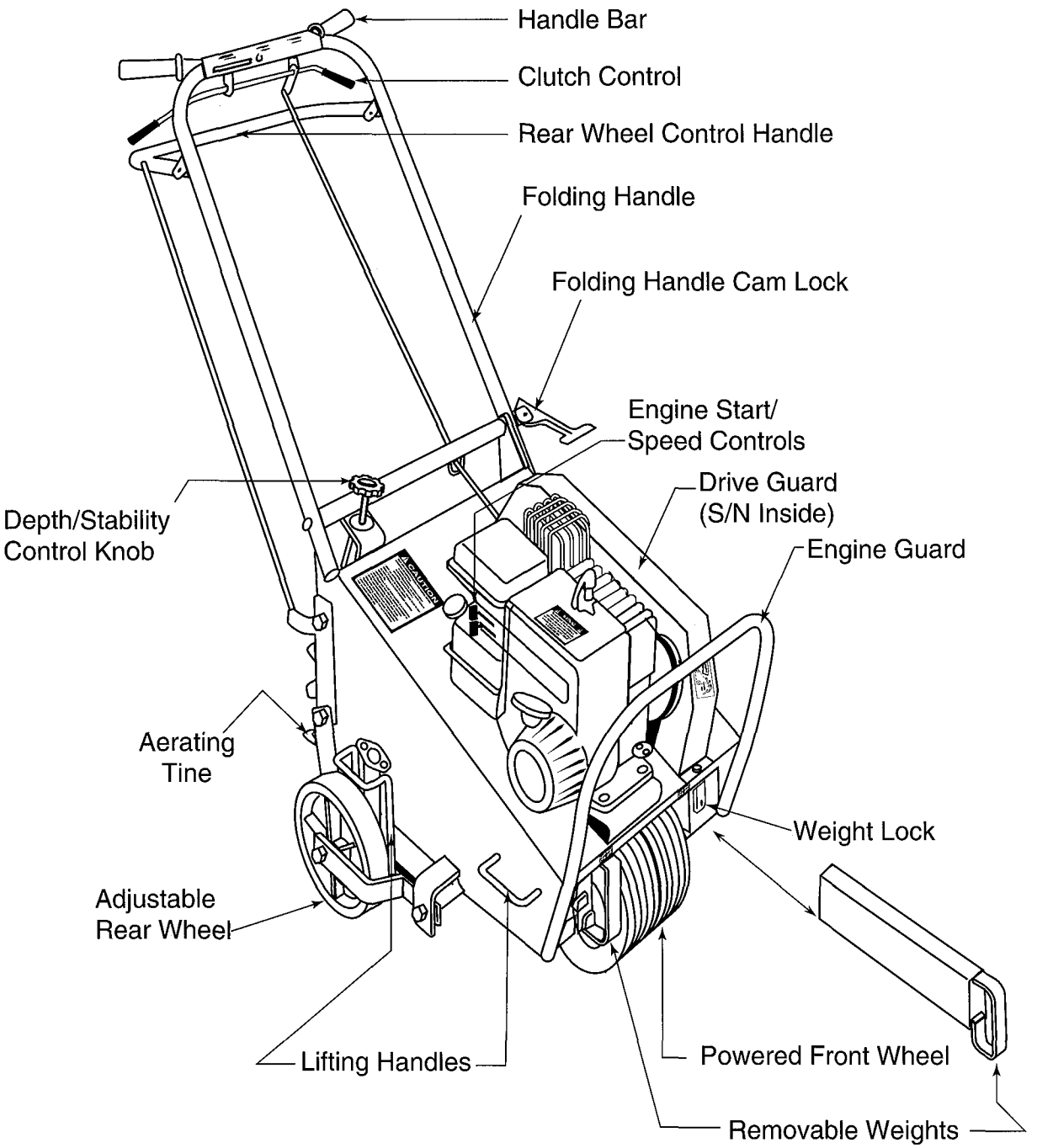
Operator's Guide

SPECIFICATIONS

A) POWER UNIT	244	442
Engine	3.5HP Briggs & Stratton I/C (2.6kw)	3.5HP I/C Briggs & Stratton I/C (2.6kw)
Clutch	Belt tensioner	Belt tensioner
Primary drive	One V-belt (A-44″)	One V-belt (A-44″)
Secondary drive	Permalube Chain	Permalube Chain
Gear reduction	6:1	6:1
B) WHEELS		
Bearings	FRONT – 3/4″ (1.9 cm) sealed ball bearings with stamping kit REAR – 3/4″ (1.9 cm) roller bearing	FRONT – 3/4″ (1.9 cm) sealed ball bearings with stamping kit REAR – 3/4″ (1.9 cm) roller bearing
Rear tires	8″ x 2″ (20 x 5cm) solid rubber	8″ x 2″ (20 x 5cm) solid rubber
Front tire	10″ x 6″ (25 x 15cm) semi-pneumatic	10″ x 6″ (25 x 15cm) semi-pneumatic
C) AERATION		
Tines	3/4″ (1.9 cm) open spoon tine. 24 per unit	3/4″ (1.9 cm) open spoon tine. 42 per unit
Aeration width	17.5″ (44.5 cm)	25 3/8″ (64.5 cm)
Hole pattern	4.4″ x 7.8″ (11.2 x 19.8cm)	3 5/8″ x 6 3/4″ (9.2 x 17.1cm)
Core depth	Up to 3″ (7.6 cm)	Up to 3″ (7.6 cm)
Holes per sq ft	4.2	5.9
Working speed	250 ft/min (4.57 km/h)	290 ft/min (5.3 km/h)
Productivity	Up to 21,900 sq ft/hr (2030 m^2/h)	Up to 37,100 sq ft/hr (3450 m^2/h)
D) WEIGHTS		
Net weight	265 lbs (120 kg)	422 lbs (192 kg)
Shipping weight	290 lbs (132 kg)	487 lbs (221 kg)
Removable weights	2 x 36 lbs (16.3 kg)	4 x 18 lbs (8.1 kg) and 2 x 36 lbs (16.3 kg)
E) DIMENSIONS		
Height	28″ (71.1cm) w/ handle folded	28″ (71.1cm) less handle
Height overall	49.5″ (126cm)	52″ (132cm)
Length	40″ (101.6cm) w/ handle folded	30″ (76.2cm) less handle
Length overall	48″ (122cm)	50″ (127cm)
Width	26.5″ (67.3cm)	36″ (91.4cm)
Shipping carton	28″ x 29″ x 43″ (71 x 74 x 109cm)	41″ x 34″ x 30″ (104 x 86 x 76cm)

MODEL 244 - FEATURES AND CONTROLS

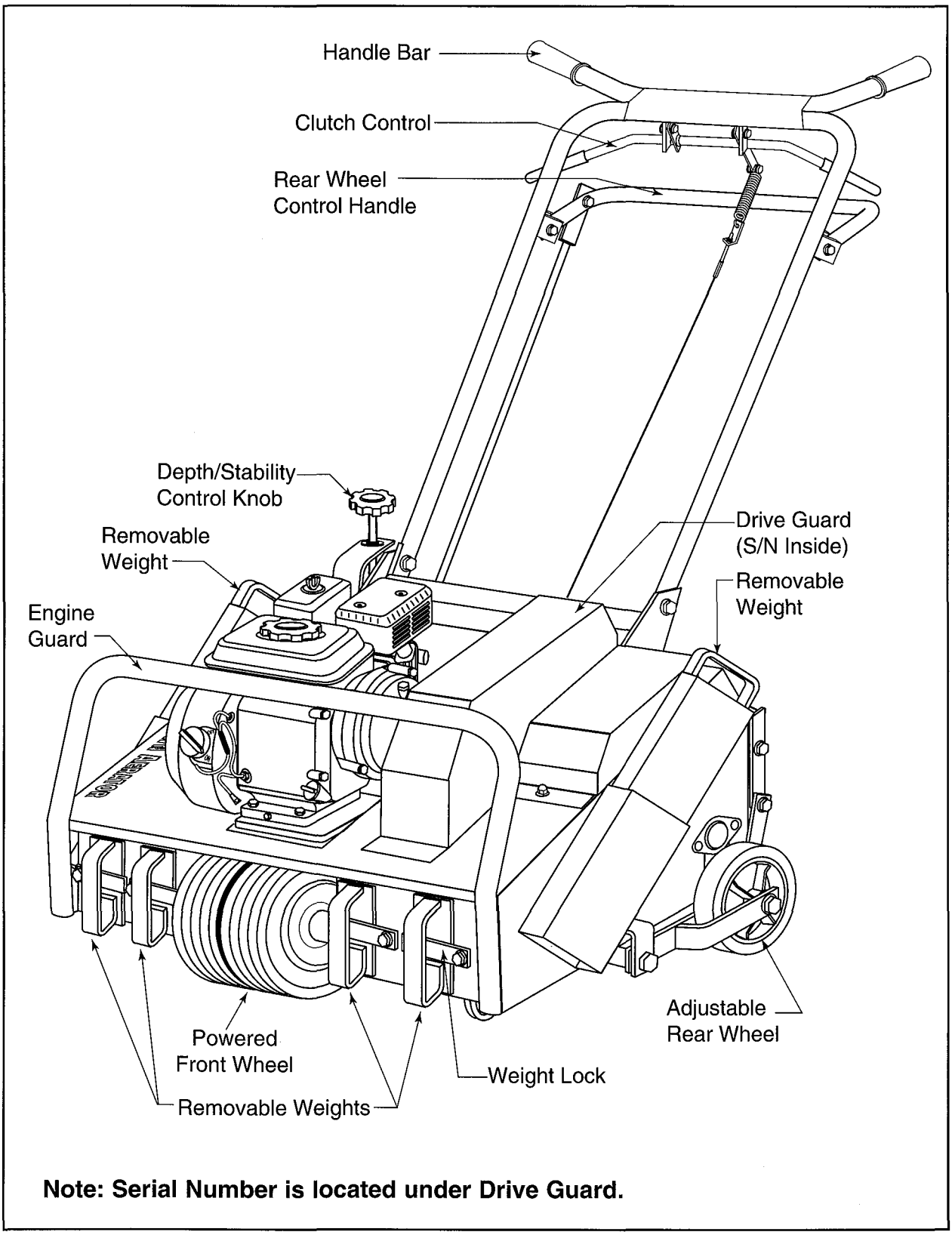


Note: Serial Number is located under Drive Guard.

Figure 1

Operator's Guide

MODEL 442 - FEATURES AND CONTROLS



Note: Serial Number is located under Drive Guard.

Figure 2

GENERAL INFORMATION

This manual will assist you in the safe operation and proper maintenance of your Toro equipment. Read it thoroughly before attempting to operate the machine. Do not hesitate to call your dealer or Toro if additional information is required.

The following safety symbols are used throughout the manual to alert you to information about unsafe actions or situations:

⚠ DANGER indicates immediate hazards that will result in severe injury or death.

⚠ WARNING indicates unsafe actions or situations that may cause severe injury or death.

⚠ CAUTION indicates unsafe actions or situations that may cause injury, and/or equipment or property damage.

This equipment should not be modified without the manufacturer's prior written authorization. Doing so without our written permission may not only affect the equipment's performance and durability, but also create safety hazards for the operator and the surroundings. Warranty will be void if changes are made to the equipment without the manufacturer's prior written authorization.

SAFETY PROCEDURES

DO: ⚠

- Read all maintenance and service instructions before attempting work
- Read engine manufacturer's operating and maintenance instructions
- Inspect lawn to be aerated and remove rocks, wire, string and other objects that might present a hazard before starting
- Indentify and mark all ground objects to be avoided, such as sprinkler heads, stakes, water valves, clothes line anchors, etc.
- This machine was designed for lawn aeration only
- Keep children away from the equipment
- Make sure that removable weights are securely latched in position while operating the aerator
- Adopt safe lifting and moving techniques when loading/unloading and moving the equipment
- Make sure all decals are in place

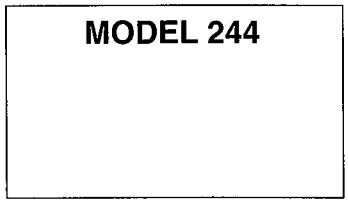
DO NOT: ⚠

- Do not service while running
- Do not use on any surface other than grass
- Do not operate on slopes exceeding 35% grade
- Do not place hands or feet near moving or rotating parts
- Do not attempt to lift the equipment alone
- Do not run engine in an unventilated space
- Do not run engine while servicing. Remove spark plug wire before commencing service
- Do not smoke or allow open flames or sparks near unit, and always stop the engine when refueling
- Do not remove guards when operating
- Do not modify this equipment
- Do not use this equipment for purposes other than intended, i.e. lawn aeration

Operator's Guide

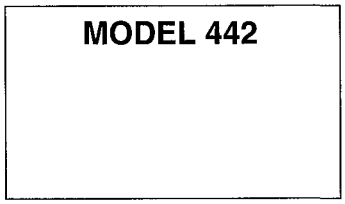
SAFETY AND INSTRUCTION DECALS

The following decals are found on Model 244 and 442 aerators. If any are missing or not legible, replace them before putting aerator into operation. Part numbers for the complete decal kits are listed below. See Figure 3 for decal placement.

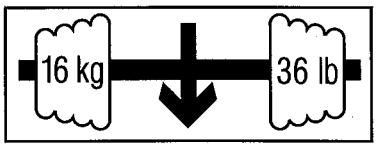


A - Model 244 only (1 EA)

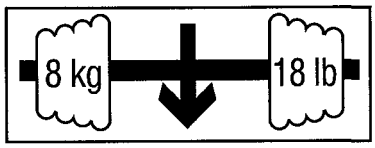
I - Model 244 & 442 (1 EA)



J - Model 442 only (1 EA)



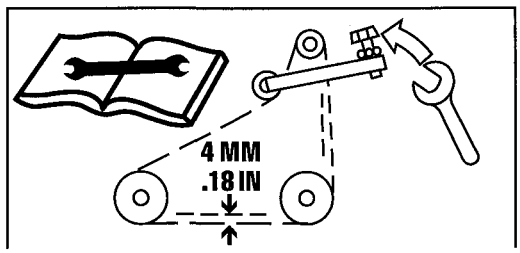
B - Model 244 & 442 (2 EA)



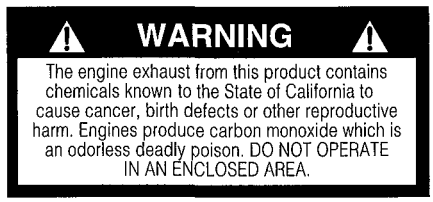
C - Model 442 only (4 EA)

D - Model 244 & 442 (1 EA)

E - Model 244 & 442 (1 EA)



F - Model 244 & 442 (1 EA)



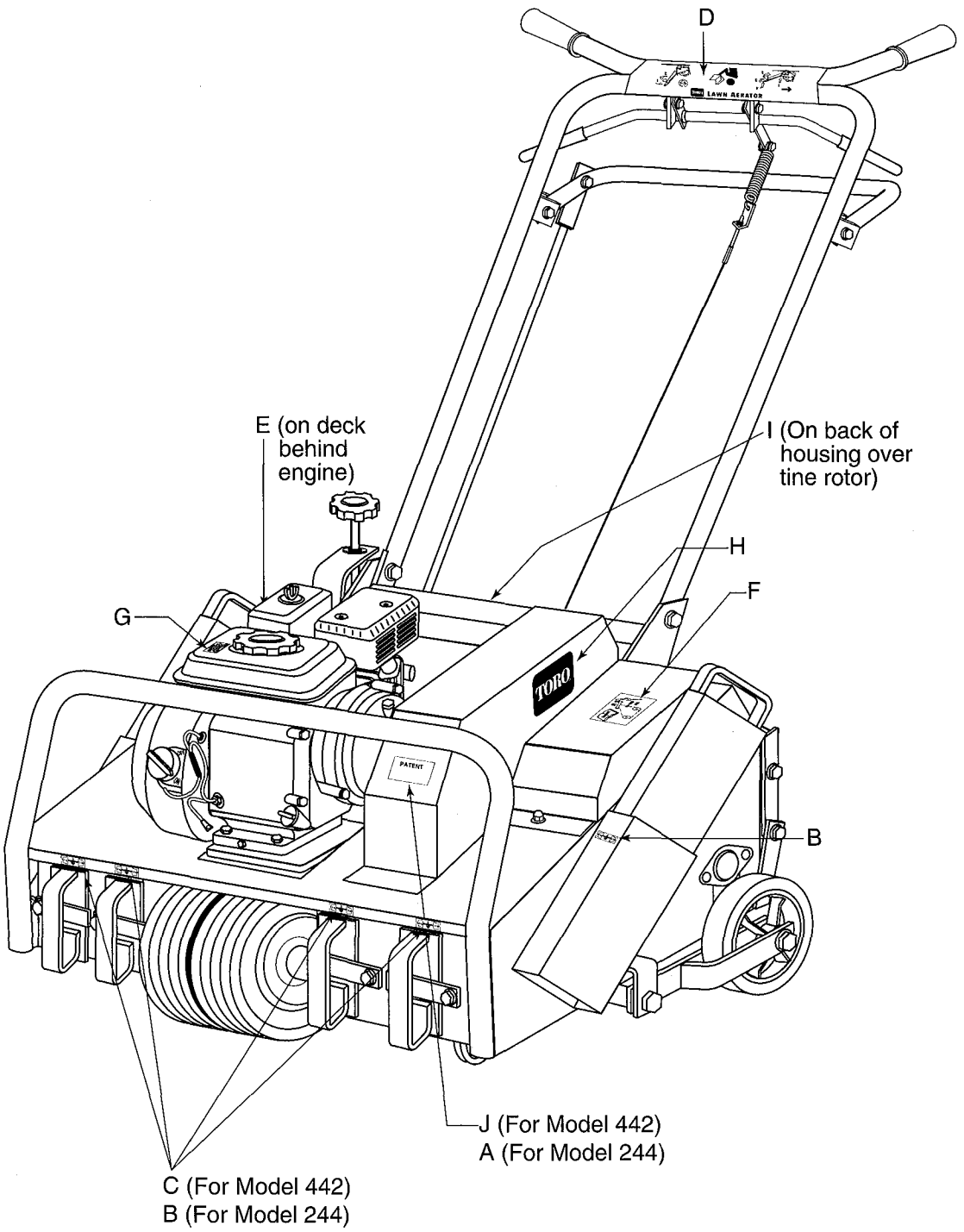
G - Model 244 & 442 (1 EA)

H - Model 244 & 442 (2 EA)

Decal Kit Part Numbers

T8343	Decal kit, Model 244	T7109	Decal kit, Model 442

DECAL PLACEMENT - MODELS 244 AND 442



Refer to page 8 for decal identification.

Figure 3

Operator's Guide

ASSEMBLY INSTRUCTIONS

Model 244 -

1. Remove wooden blocks. Note: Watch for nails and wood splinters. Wear eye protection.
2. Carefully cut open side of carton.
3. Lawn Aerator 244 is shipped with handle folded. Rear wheel control handle strapped together with the clutch control. First cut straps, then unfold handle. Lock handle in position using the cam lock lever.

Model 442 -

1. Remove wooden blocks. Note: Watch for nails and wood splinters. Wear eye protection.
2. Carefully cut open side of carton.
3. Lawn Aerator 442 is shipped with the handle detached. Mount the handle using 2 each 1/2″ wrenches.
   (A) Slide handle onto handle mounting brackets (see figure 4).
   (B) Insert and tighten fasteners, which are located on handle mounting brackets (See figure 5-A). For further detail on assembly, see page 24.
4. Connect top of control rod to rear wheel control handle with fasteners located on rear wheel control handle (see figure 5-B). For further detail on assembly, see page 24.
5. Connect bottom of control rod to OUTER side of lever on the torque arm using the fastener assembly (see figure 5-C).
6. Run the clutch cable through the guide hole in the handle bracket support bar located at rear of the deck (see figure 4).
7. Attach end of cable to the "S" hook located on the belt idler pulley.

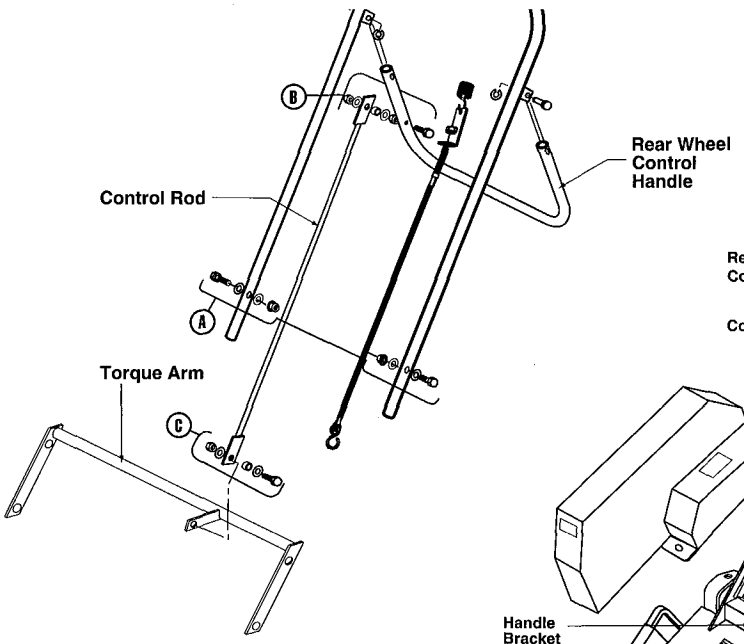


Figure 5

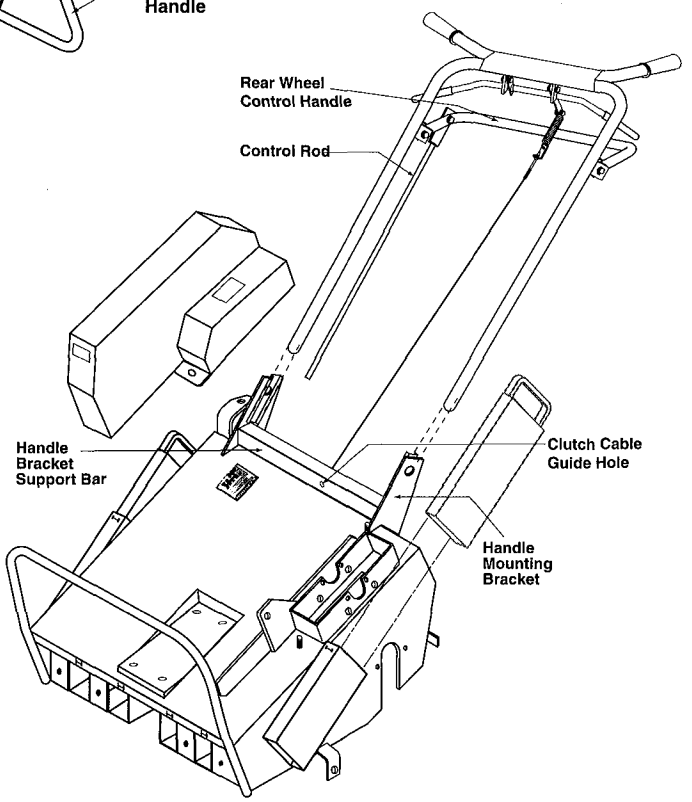


Figure 4

AERATION TIPS

Should I water before aerating?

Best aerating condition is a soft and moist ground. If you are unsure of the ground conditions such as in a soil with a high clay content, a simple test will determine whether it is necessary to water before aerating. Using a garden hand spade or a large screw driver, you should be able to drive the tool in the ground 2 to 3 inches with little effort. If you are unable to do so, then watering the lawn a day before aerating is necessary.

When should I use the removable weights?

Soil conditions will dictate whether extra machine weight is needed for effective coring action. The weights are provided to give you added control, and greater tine penetration.

BEFORE YOU START

1. Make sure that engine oil is at engine manufacturer's recommended level (refer to engine manual). Be sure gear reduction oil is at engine manufacturer's level.
2. With the folding handle in its operating position, lock the handle cam lock (Model 244 only).
3. Rear wheel control handle must be pulled up so rear wheels are all the way down.
4. If weights are needed, insert and lock in place.
5. Be sure handle is properly mounted.

⚠ CAUTION: Be sure clutch cable is routed properly.

6. Test clutch handle to insure clutch spring releases freely.
7. The engine top speed is preset by the engine manufacturer. Consult the engine manufacturer's manual for directions to adjust the governor and carburetor if speed is not within correct range.

AERATING

1. Start engine and adjust throttle setting to provide a comfortable walking speed and maintain control of the equipment at all times.
2. Adjust depth control knob (see figure 1 or 2) to desired depth. Coring depth decreases by turning the knob clockwise. Note that by raising the rear wheels all the way up (to obtain maximum coring depth) you will reduce the unit's stability but increase length of core.
3. Push down the rear wheel control handle to lower aerating tines into the ground (rear wheels will rise).
4. Push down on handle bar, for better tine penetration and maneuverability (front wheel will rise).
5. Engage clutch control.
6. Adjust engine throttle setting, if needed, for comfortable speed.
7. To stop, release clutch control.

⚠ CAUTION: Never cross hard objects or surfaces (sidewalks, driveways, stepping stones, etc.) with tines down.

REAR WHEEL ADJUSTMENT

The rear wheel Depth/Stability Control Knob (see figure 6) allows adjustment for more stability (and maneuverability) by turning knob clockwise. Adjusting for more depth by turning knob counter-clockwise determines the length of the cores pulled in the following ways:

(A) The rear wheels can be adjusted to the level you desire so you can control the penetration of the tines to within a "fraction of an inch." The length of the cores pulled can be controlled accordingly.

(B) With the rear wheels adjusted to the full up position, you will obtain maximum tine penetration. Pushing down on the machine's handle bars will put all the weight of the machine on the tines. In this configuration you will pull the longest cores. (Front wheel will rise).

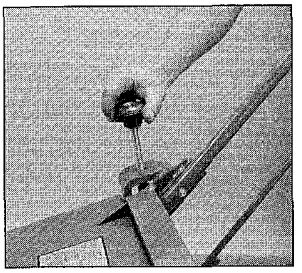


Figure 6
Depth/Stability Control Knob

NOTE: Adjusting for more stability will shorten the length of the cores you pull. You will gain greater side-to-side stability (See below "Operating on Hills." Adjustments for greater stability will also improve maneuverability during aeration.

TURNING AND MANEUVERING THE AERATOR

Gradual maneuvering while aerating can be accomplished by simply guiding the machine. We recommend that you adjust your engine's speed control to allow for a comfortable walking speed. This will also help you maintain complete control while working in tight spaces. Adjusting for more stability (with the rear wheels lowered, reducing tine penetration) will make turning easier.

When reversing direction or making sharp turns, two methods of turning can be used. Select the safest and most comfortable method for the conditions you face:

(A) Release clutch control handle, pull up rear wheel control handle, then pivot machine on rear wheels to turn.

(B) Release clutch control handle, lift handle bar and pivot machine on front wheel.

⚠ Warning: This method is not recommended when operating on hills. (See next section).

OPERATING ON HILLS

⚠ WARNING - DO NOT OPERATE ON HILLS EXCEEDING 35% GRADE.

This unit is not designed to be used on steep slopes. Be aware that when operating on hills the tilt of the aerator will cause the machine's center of gravity to shift to the downhill side of the machine. Under these circumstances, you may experience:

(A) The need to exert a greater effort to steer and maintain the balance of the machine.

(B) Uneven tine penetration, when operating across a hill. Due to the shifted center of gravity the downhill tines will penetrate to the maximum depth, while uphill tines may not.

⚠ WARNING: In extreme situations (very steep hills) the machine may be so unbalanced, that it may present the danger of rolling over. Do not operate on steep slopes.

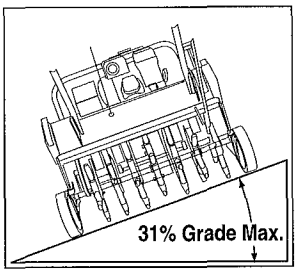


Figure 7
31° Grade

When operating on hills, you may consider the following:

(A) Operate the machine up and down the hills rather than across them.

(B) Use the rear wheel depth/stability control knob to set the rear wheels for extra stability. This can be a great benefit when you do choose to run the aerator across a hill. An added benefit of using the rear wheel depth control when aerating across a hill is that you will improve the consistency of the cores pulled from the uphill tines when compared to those pulled by the downhill tines.

(C) Removing the downhill weight to reduce roll-over risk and maintain consistent core plugs length (on 442 only). See Figure 8.

(D) Remove remaining weight from downhill side to uphill side after each pass when operating across hills.

⚠ WARNING: Never disengage tines from ground when travelling up or down hill. Only disengage on flat surface.

Figure 8
Remove Downhill Weight

TRANSPORTING THE TORO AERATOR

MODEL 244

The Toro 244 Aerator has three convenient features to assist you in transporting the unit in your pick-up truck, van, and even in some car trunks. Those features are: removable weights, a folding handle, and convenient lifting handles on the sides of the machine. The features are provided for your optional use and can be of great benefit when required.

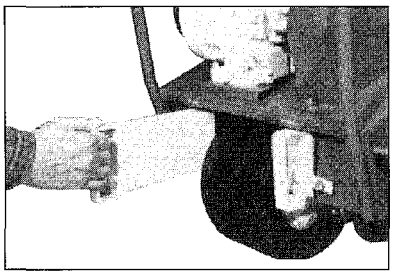


Figure 9

Removable Weights

- Unlatch weight locks.
- Grab weight handles and pull the weights from the machine.

Note: Weight 36 lb/16 kg each

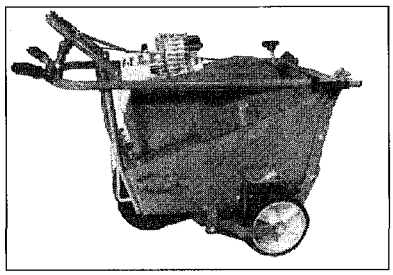


Figure 10

Folding Handle

- Release handle cam lock.
- Fold handle forward over the engine until it is resting on the engine guard.

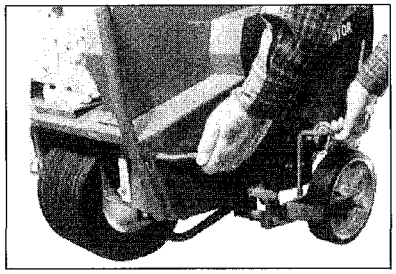


Figure 11

Lifting Handles

Lifting handles are located on both sides of the aerator, to allow two people to lift the unit. WARNING: Avoid back or muscle injury! Use safe lifting techniques, do not exceed your physical limitations.

⚠ DO NOT attempt to lift alone.

Note: Weight 193 lb/88 kg w/o weights

MODEL 442

The removable weights on the Model 442 is for tine penetration as applicable.

⚠ CAUTION: To avoid back or muscle injury, do not attempt to lift the Model 442.

With the weights in place, this model is designed for easy loading and unloading on trailers. The treaded front wheel provides better traction for ramp. The unit will load more easily when the engine is operating.

Maintenance and Service Instructions

CLEANING AND WASHING

Regular cleaning, washing and lubricating will prolong the service of your machine.

NOTE: Use care with power washers to avoid damage to Warning Decals, Operator Instruction Labels, Bearings, Chain and Engine. Limit direct spray on these items.

⚠ DO NOT EXCEED 1000 PSI WATER PRESSURE FOR CLEANING.

⚠ TWO-MINUTE WARNING

Aerators may be tipped on their engine guard for cleaning and access for no more than 2 minutes. Engine damage may result from gasoline draining into the crankcase if prolonged. See engine manufacturer's operating and maintenance instructions.

STORAGE

1. Refer to engine manufacturer's instructions for engine storage information.
2. Clean machine.
3. Cover all scratches with touch up paint.
4. Lubricate according to Lubrication Schedule. (See page 14).
5. Lightly oil or mil board tines to inhibit rust.
6. Store unit with machine in transport position.
7. Handle may be folded if desired.
8. Covered or indoor storage is recommended.

PREVENTATIVE MAINTENANCE SCHEDULE

LUBRICATION SCHEDULE

20 hrs	60 hrs	as req'd	store	
	●	●	●	Engine oil (Refer to engine mfg. manual)
	●	●	●	Rear wheel bearing – grease (lithium/soda)
		●	●	Chain, chain lubricant.
			●	Tines, light machine oil
●				Linkage

INSPECTION SCHEDULE

Each Use	20 hrs	
●		Engine oil (Refer to engine mfg. manual)
●		Clutch tension
●		Chain tension
●		Decals and warnings
●		Fasteners and fittings
	●	Belt wear (cracks, fraying, edges rounding)
●		Folding cam handle (on Model 244)
	●	Tine condition and wear
	●	Frame condition (rust, cracks, etc.)
	●	Clutch and cable
●		Excessive vibration
●		Engine air cleaner

TINE WEAR

After your Toro Aerator has been used for sometime, the tines will tend to wear. When this happens their aerating performance will diminish. Inspect tines using the drawing below, replace when at minimum length or before. (Tines are 5″ when new)

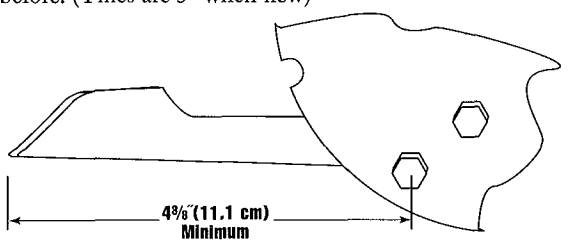


Figure 12

Section 3

ENGINE SERVICE AND MAINTENANCE

Follow the engine manufacturer's maintenance instructions. Should any malfunction occur with the engine during the warranty period, take it to an Authorized Service Dealer. DO NOT tear down the engine, as this may void the Engine Manufacturer's Warranty. Note: Refer to engine manufacturer's owner's manual for all engine service information.

DRIVE TRAIN

Engine, Removal and Replacement

1. Remove weights for access.
2. Remove drive guard.
3. Remove V-belt.
4. Remove engine bolts.
5. Lift engine from unit.
6. Remove and retain V-pulley and key.
7. Replacement procedure opposite of removal.
8. Adjust drive belt, see following section.

Drive Belt Replacement and Adjustment

1. Remove drive guard.
2. Remove V-belt.
3. Inspect condition of V-pulleys and replace if necessary.
4. Check V-pulley alignment by looking down belt with clutch engaged. Be sure both V-pulleys are directly in line with each other. Correct their alignment if they are not.
5. Install new belt over small V-pulley first, then over the large V-pulley. (See Figure 13).

   NOTE: Many parts including the drive belt on your Toro Aerator are made specifically for Toro to give many hours of use. Replace all parts with genuine Toro parts to obtain maximum performance and life.
6. Insure V-belt is inside both keeper arms.
7. Check that the V-belt clears the top belt keeper arm when idler pulley is pulled tight. Check that the aerator rolls freely (with handle folded on Model 244), with the belt slack. Adjust the keeper, or clutch cable length if necessary.
8. For clutch adjustments refer to next section (Clutch Cable Removal and Replacement).
9. Replace drive guard.

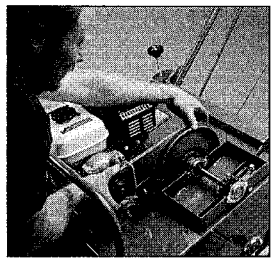


Figure 13
Routing of V-belt

Clutch Cable Removal and Replacement

1. Remove old cable.
2. Route new cable through the cable guide on the bottom of the handle lock tube.
3. Attach cable to clutch control and the "S" hook on the idler pulley spring.
4. Adjust cable to obtain 3/4" to 1 1/4" extension of the clutch spring when clutch is engaged. (See figure 14).

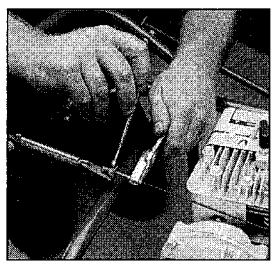


Figure 14
Adjusting Clutch

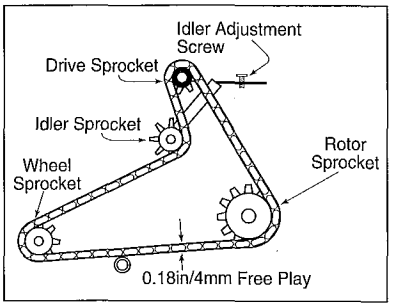


Figure 15

Chain Removal and Replacement

1. Remove weights.
2. Remove drive guard.
3. For easier servicing lift machine onto a bench (Model 244 only).
4. Back off chain idler adjustment bolt and lock nut
5. Remove master link and remove chain.
6. Inspect and align sprockets. (See Figure 16). Check set screws (double set screws for wheel/rotor).
7. Install new chain from top (drive sprocket side) and route in accordance with figure 15. **NOTE: Chain is most easily connected just behind the front drive wheel sprocket.**
8. Install master link with pin plate on engine side of chain, with keeper plate installed on outboard side. Install clip with split to front of machine.

Figure 16
Aligning Sprockets

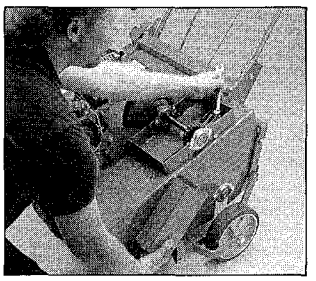


Figure 17
Adjusting Tension

Adjusting Chain Tension

1. Remove drive guard, loosen hex nut on idler adjustment bolt.
2. Turn idler adjustment bolt to adjust tension to allow 1/8" to 1/4" movement at the center point between the wheel sprocket and the rotor sprocket (see Figures 15 and 17).
3. Set idler adjustment hex nut.

HANDLE - MODEL 244 ONLY

Inspection

1. The handle cam lock must lock shut under moderately heavy hand pressure. Handle frame should be tightly secured to the aerator body.
2. Check the cam rod lock nut. If it turns freely by hand when cam is released, the locking strength of the nut has been relieved and the nut must be replaced to maintain the security of the lock.

Adjustment

With the handle in the operating position, slowly tighten the cam rod lock nut (1/4 turn at a time) until the cam handle locks with moderately heavy hand pressure. ⚠ IMPORTANT: excessive adjustment of the lock nut will damage the cam handle. ALWAYS replace a free spinning nut to avoid unwanted loosening of the handle. For smooth operation of the cam, apply a small amount of grease on the cam edge.

WHEELS

Rear Wheel Removal and Replacement

1. Lower the rear wheel control handle to let the aerator rest on the tines.
2. Turn the rear wheel Depth/Stability control knob to adjust the rear wheels for minimum depth clockwise (more stability).
3. Remove the wheel.
4. Install a new wheel with grease fitting facing out, with seals carefully in place on the wheel bushing. Insert axle bolt through wheel and wheel lift frame. Use washer and lock nut, tighten firmly.
5. Grease wheel.

Drive Wheel Shaft Removal and Replacement

1. Remove weights.
2. Remove drive guard.
3. Loosen chain by loosening hex nut on adjustment screw, back off screw to loosen the chain. Remove master link and chain.
4. Tip the front end up to let the aerator rest on its handle. The front wheel will be approximately 1 foot off the ground.
5. Remove the wheel shaft bearing bolts (4 on the 244 and 6 on the 442).
6. Remove the wheel axle assembly.

Drive Wheel Shaft Removal and Replacement (Continued)

7. Pull sprocket and bearing from shaft. NOTE: Sprocket is double set screwed. To remove the bearings, you must first remove the collar by loosening the set screw, then insert pin punch into the hole next to the set screw and, using a hammer, with moderate striking, hit collar so that it rotates in the opposite direction the rotor would normally turn. If bearings are rusted in place they will have to be replaced along with the wheel and shaft.
8. Install bearings and sprocket loosely onto the shaft. Model 244: hub side towards wheels. Model 442 has 3 bearings. Wheel bearings should have hubs facing away from wheel. Wheel shaft bearing should have hub facing away from sprocket.
9. Bolt bearings into place.
10. Center the wheels between the weight cages and lock bearing collars in the same direction as wheel rotates.
11. Align and tighten the sprockets (there are double set screws stacked two in each hole) use blue loctite with the key in place.
12. Replace the chain following procedures in section "Chain Removal and Replacement." (See page 16).
13. Adjust chain per section "Adjusting Chain Tension" and replace drive guard.

TINE AND TINE SHAFT

Tine Replacement

1. Remove weights.
2. Fold handle on the Model 244.
3. Place on workbench (Model 244 only) and chock wheels.
4. Note direction of tine bolt. **Reinstall the bolt facing in the same direction on the Model 244 to avoid contact with weights.**
5. Remove and replace tines by loosening stop bolt, remove retaining bolt and old tine, insert new tine and fasten with retaining bolt in the same direction as it was removed. When all tines are replaced, tighten stop bolts. NOTE: Replace worn lock nuts to insure that bolts will hold tines in place.

Tine Shaft Bearing Removal and Replacement

1. Remove weights.
2. Remove drive guard.
3. Fold handle for better access to tines (on Model 244 only).
4. Elevate approximately 4", block and chock rear wheels.
5. Cycle the drive chain for access to master link.
6. Back off chain idler adjustment screw counter clockwise to loosen the chain.
7. Remove the master link and free rotor sprocket.
8. Remove the tine rotor shaft bearing bolts (4).
9. Remove the chain scraper bolts (2) and chain scraper (on Model 244 only).
10. Remove the rotor shaft assembly.
11. Remove outer rotor bearing by loosening the set screw in the collar.
12. Unlock collar (best accomplished by using a hammer and pin punch). Insert pin punch into the hole next to the set screw and, using the hammer, with moderate striking, hit collar so that it rotates in the opposite direction the rotor would normally turn. (See figure 18).
13. Reverse these steps to reinstall.
14. Refer to sections "Chain Removal and Replacement" and "Adjusting Chain Tension" for chain replacement and adjustment of chain tension.

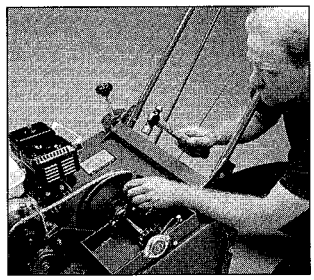


Figure 18
Unlocking Collar

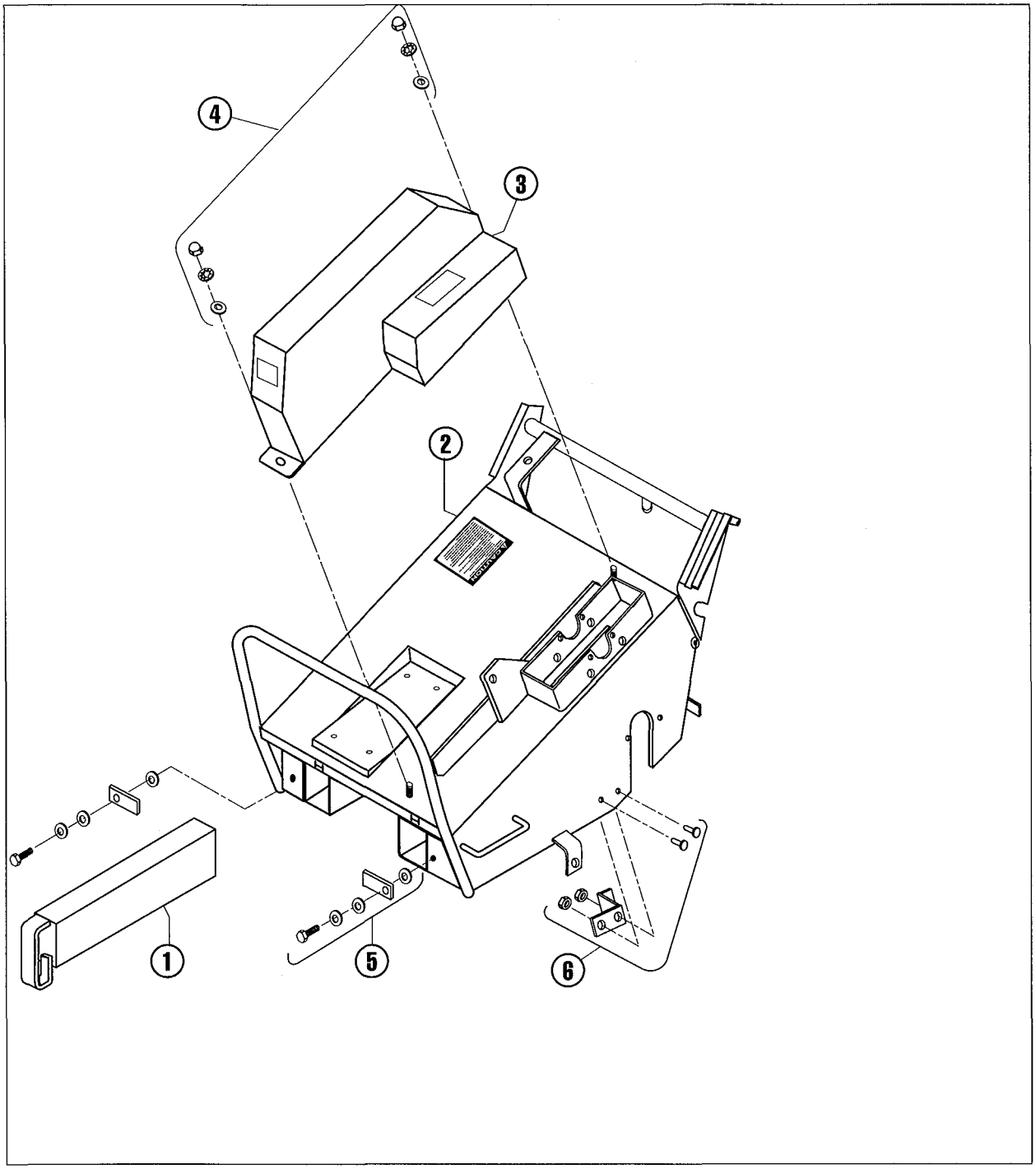
Free-Wheeling Tine Assembly Removal and Replacement - Model 442 Only

Complete steps 1 through 12 in previous section, then proceed with the following:

1. After the bearing is off the rotor, unlock the inner bearing that holds on the tine assembly.
2. Remove outer free-wheeling tine assembly.
3. Place the new rotor assembly beside the old assembly so that you have a pattern to follow which provides the correct direction which the new tines are to be installed. You can also refer to the tines on the fixed tine assembly as an example of proper assembly.
4. Once the tines are installed on the free-wheeling assembly, re-install the inner and outer bearing assemblies on the free-wheeling assembly with the bearing hubs facing toward the fixed tines making sure that the inner bearing has a locking collar. Hand tighten the nuts only.
5. Slide the new free-wheeling tine assembly on the shaft making sure that the tine direction matches the direction of the fixed tine assembly, the bearing with the locking collar faces the fixed tines and butts up against the shoulder of the shaft.
6. Tighten the four nuts for the bearing assemblies.
7. Lock the bearing collar in place with the hammer and punch making sure the collar locks in the same direction as the rotation of the fixed tines.
8. Replace outer shaft bearing and re-install the entire rotor assembly by reversing steps 1 through 12.

Instructions are for one side. Both are identical procedurally.

Parts Main Frame – Model 244



PARTS MAIN FRAME - MODEL 244

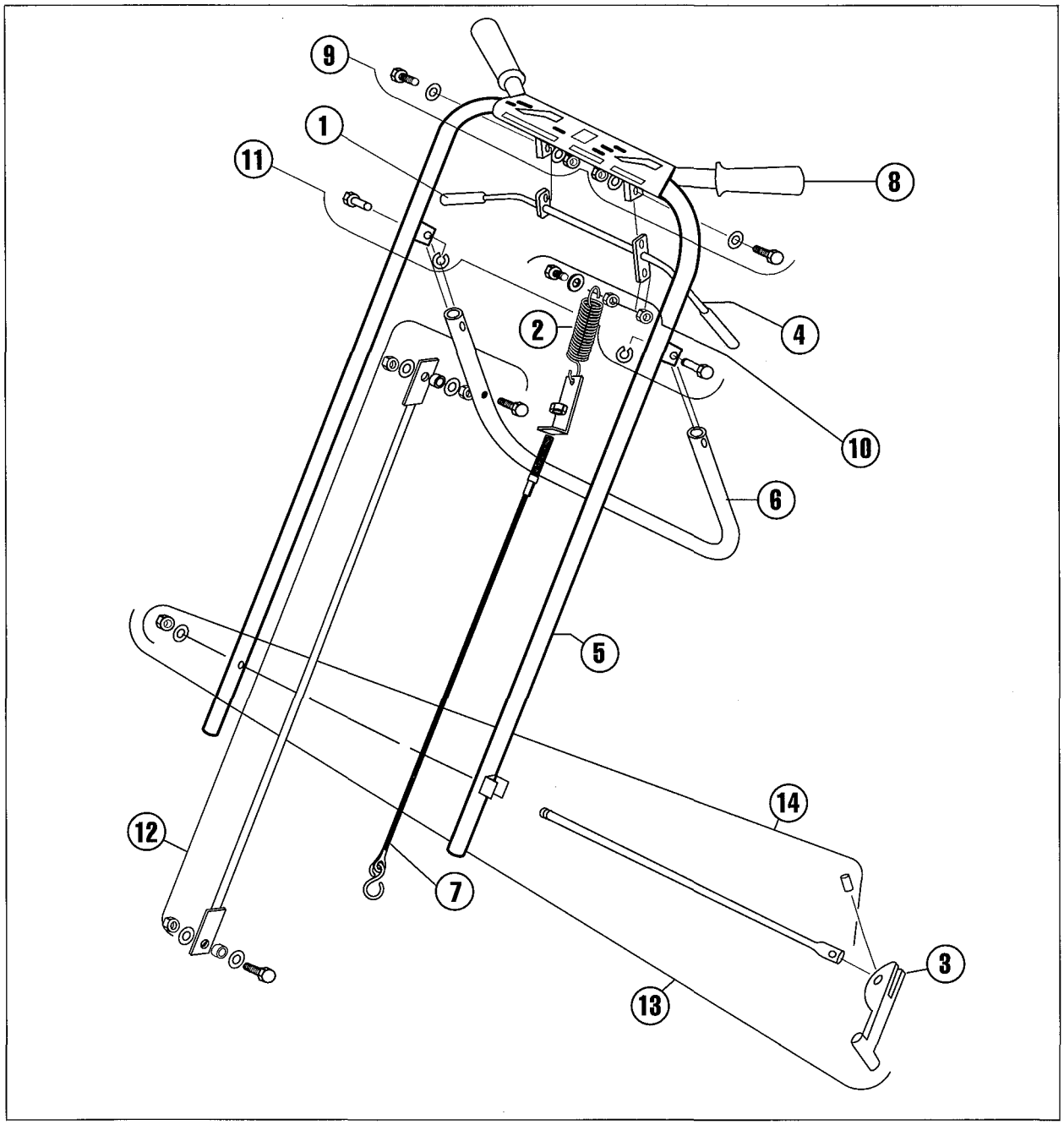
Item No.	Part No.	Description	No. Req'd.
1	T7144	Weight, 36 lbs., solid steel	2
2	T7154	Housing with decals	1
3	T7186	Drive guard with decals	1
4	T7200	Drive guard fastener kit	1
5	T7201	Latch kit, weight with hardware	2

Item No.	Part No.	Description	No. Req'd.
6	T7202	Scraper kit, chain with hardware	1
	T7227	Decal kit, 244	1

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number

Parts Handle and Control – Model 244



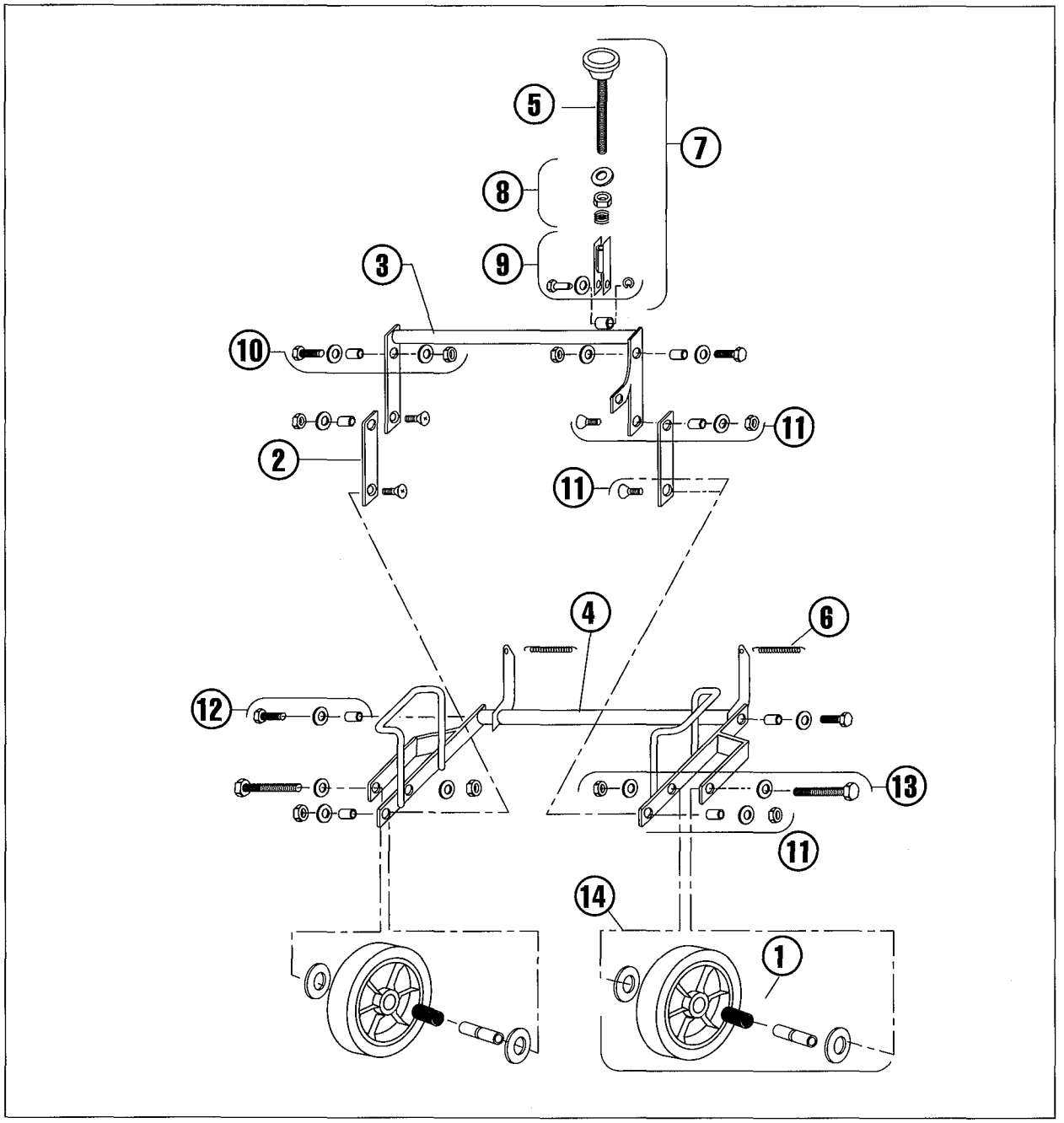
PARTS HANDLE AND CONTROL - MODEL 244

Item No.	Part No.	Description	No Req'd.
1	T0034	Grip, clutch	2
2	T5129	Spring, clutch	1
3	T5256	Cam, locking	1
4	T7149	Clutch control with grips	1
5	T7151	Handle with grips	1
6	T7174	Handle, control, rear wheel	1
7	T7189	Clutch cable	1

Item No.	Part No.	Description	No Req'd.
8	T7191	Grips, pair	1
9	T7221	Fastener kit, clutch control to handle	1
10	T7222	Clutch cable kit	1
11	T7223	Pin kit, rear wheel control handle	1
12	T7224	Control rod kit, rear wheel	1
13	T7225	Cam rod kit, with cam	1
14	T7226	Cam rod kit, without cam	1

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number



PARTS REAR WHEEL - MODEL 244

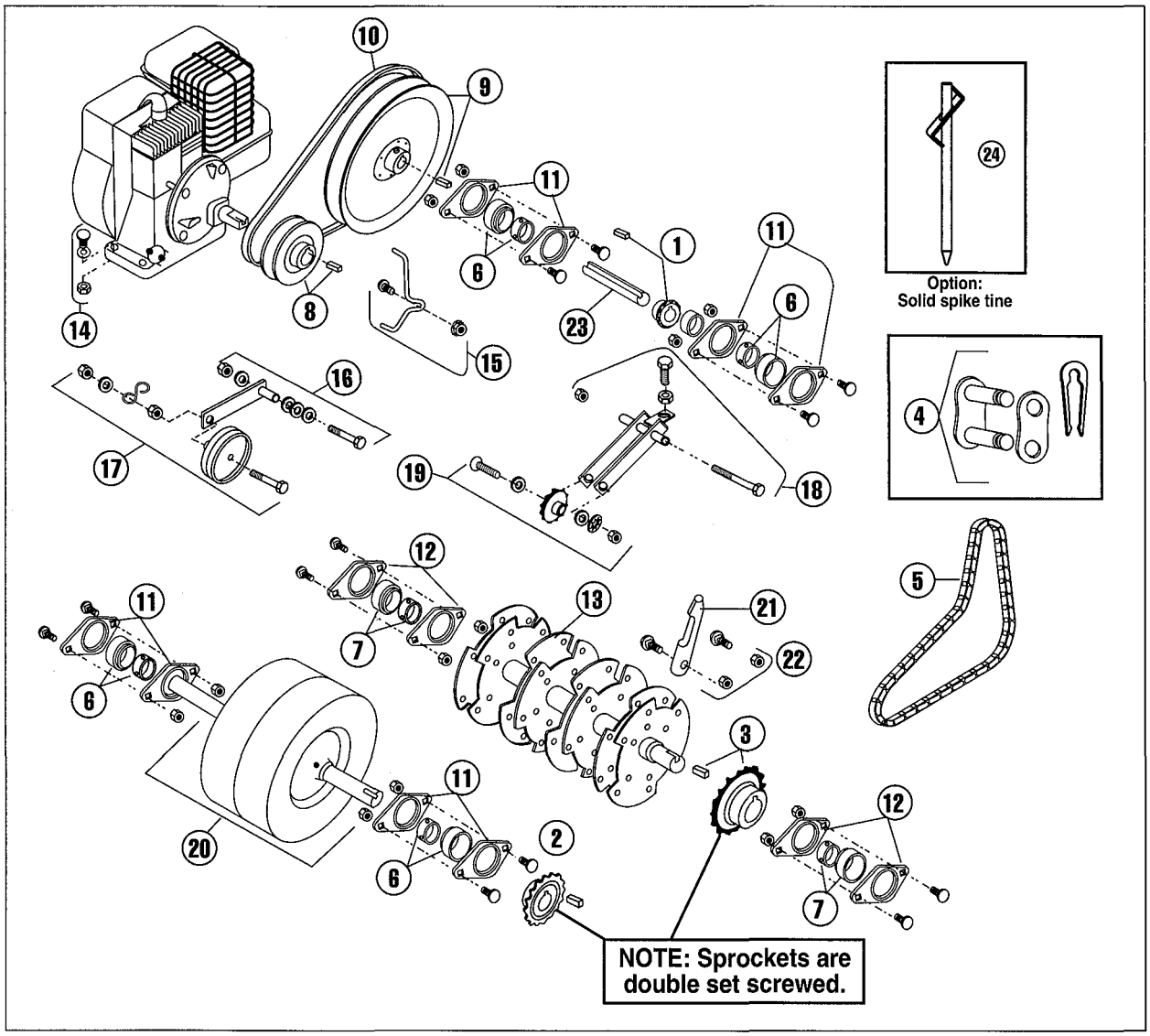
Item No.	Part No.	Description	No. Req'd
1	T0048	Bearing, roller with bushing and seals	2
2	T7107	Lift link	2
3	T7133	Torque arm, depth adjustment	1
4	T7148	Wheel carriage, axle	1
5	T7163	Knob, depth/stability	1
6	T7195	Spring, axle	2
7	T7213	Control kit, depth/stability	1
8	T7214	Knob spring kit, depth/stability	1

Item No.	Part No.	Description	No. Req'd
9	T7215	Bracket kit, depth/stability	1
10	T7216	Fastener kit, torque arm/housing	2
11	T7217	Fastener kit, linkage	4
12	T7218	Fastener kit, carriage/housing	2
13	T7219	Bolt kit, rear wheel	2
14	T7220	Wheel kit, rear, with roller bearing, bushing and seals	2

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number

Parts Power Train and Tine Rotor – Model 244



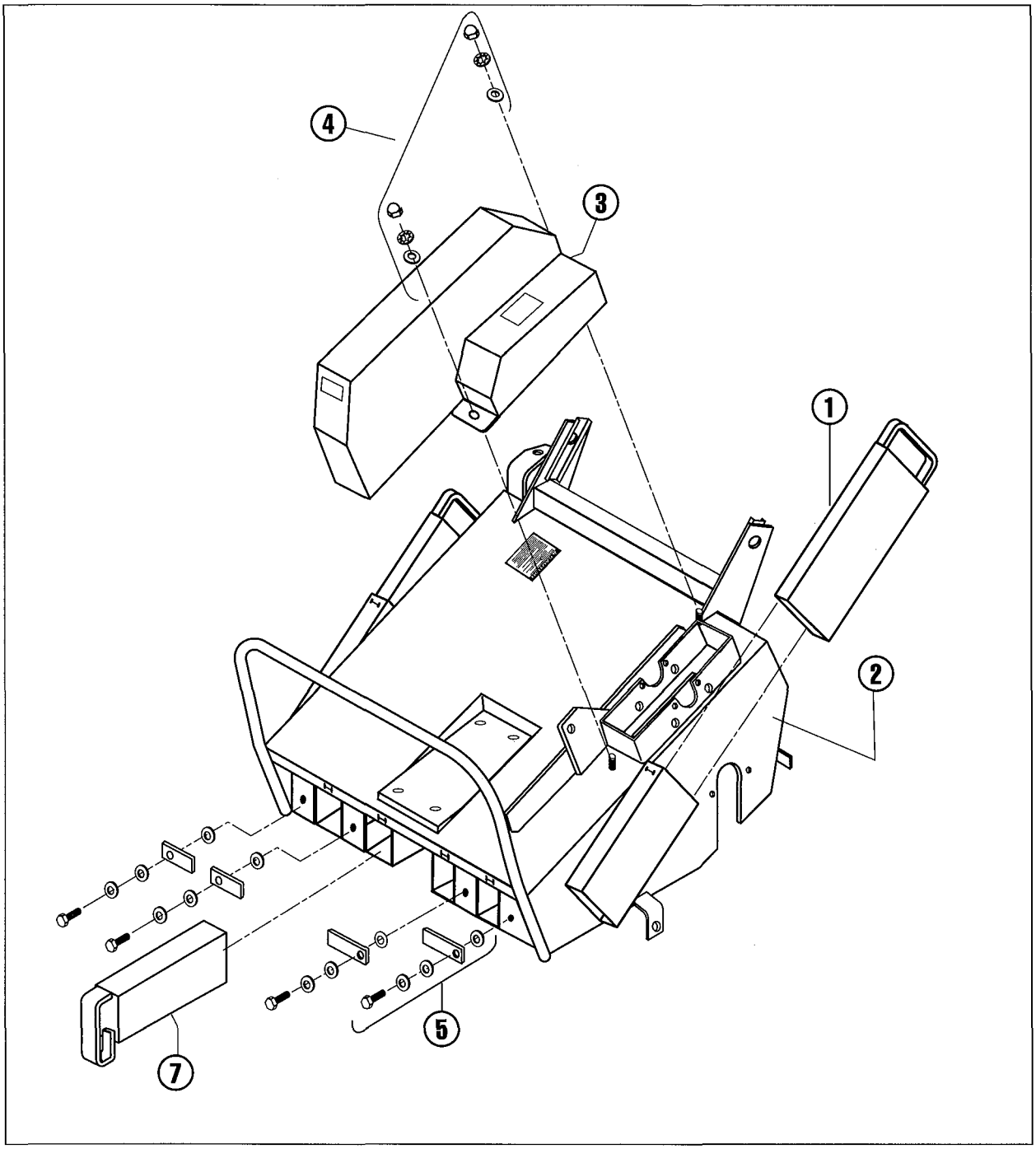
PARTS POWER TRAIN AND TINE ROTOR - MODEL 244

Item No.	Part No.	Description	No. Req'd
1	T0301	Sprocket, jackshaft, with key and spacer	1
2	T0302	Sprocket, wheel, with set screws and key	1
3	T0303	Sprocket, rotor, with set screws and key	1
4	T0307	Master link for T0308	1
5	T0308	Chain, #40 perma lube roller	1
6	T0315	Bearing, 3/4" with lock collar	4
7	T0317	Bearing, 1" with lock collar	2
8	T0328	V-pulley, A-4" with set screws and key	1
9	T0332	V-pulley, A-10" with set screws and key	1
10	T0336	V-belt, A-44" special	1
11	T5185	Stamping kit w/fasteners (for 3/4" bearing)	4
12	T5786	Stamping kit w/fasteners (for 1" bearing)	2
13	T7157	Rotor shaft, tine without bolts	1
14	T7204	Fastener kit, engine	1

Item No.	Part No.	Description	No. Req'd
15	T7205	Belt keeper kit	1
16	T7206	Idler arm kit, pulley	1
17	T7207	Idler pulley kit	1
18	T7208	Idler arm kit, chain	1
19	T7209	Idler sprocket kit, chain	1
20	T7210	Front wheel and shaft kit	1
21	T7211	Tine set, closed spoon, 24 each	1
	T7112	Tine set, closed spoon, 6 each	4
22	T7212	Tine/Spike fastener kit, 48 ea. bolts and nuts	1
	T7103	Tine/Spike fastener kit, 12 ea. bolts and nuts	4
23	T7232	Jackshaft, with key	1
24	T7311	Spike set, 24 each	1

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number



PARTS MAIN FRAME – MODEL 442

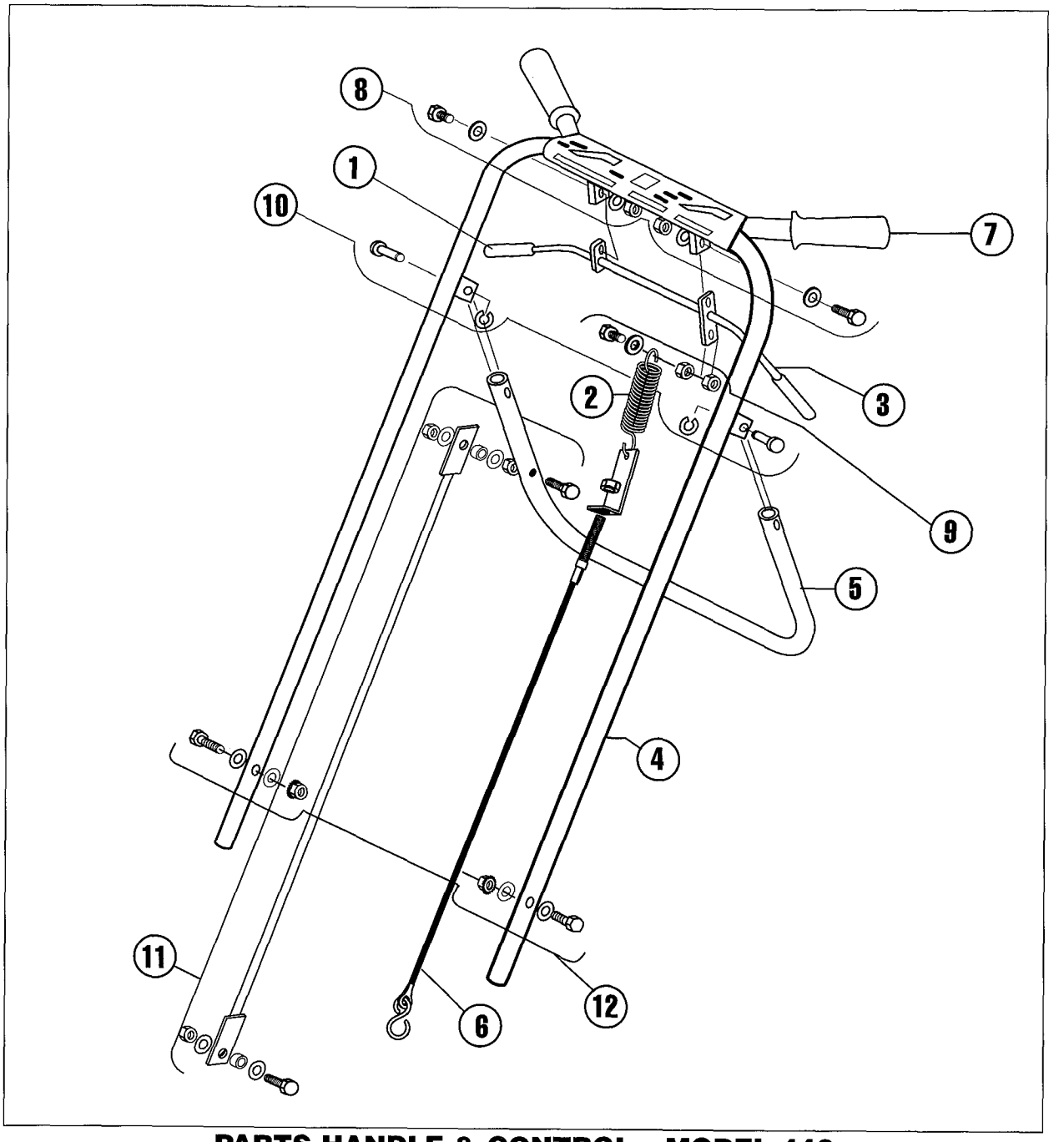
Item No.	Part No.	Description	No. Req'd
1	T7144	Weight, 36 lbs., solid steel	2
2	T7118	Housing with decals	1
3	T7100	Drive guard with decals	1
4	T7200	Fastener kit, drive guard	1
5	T7201	Latch kit, weight with hardware	4

Item No.	Part No.	Description	No. Req'd
7	T7123	Weight, 18 lbs., solid steel	4
	T7109	Decal kit	1

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number

Parts Handle and Control – Model 442



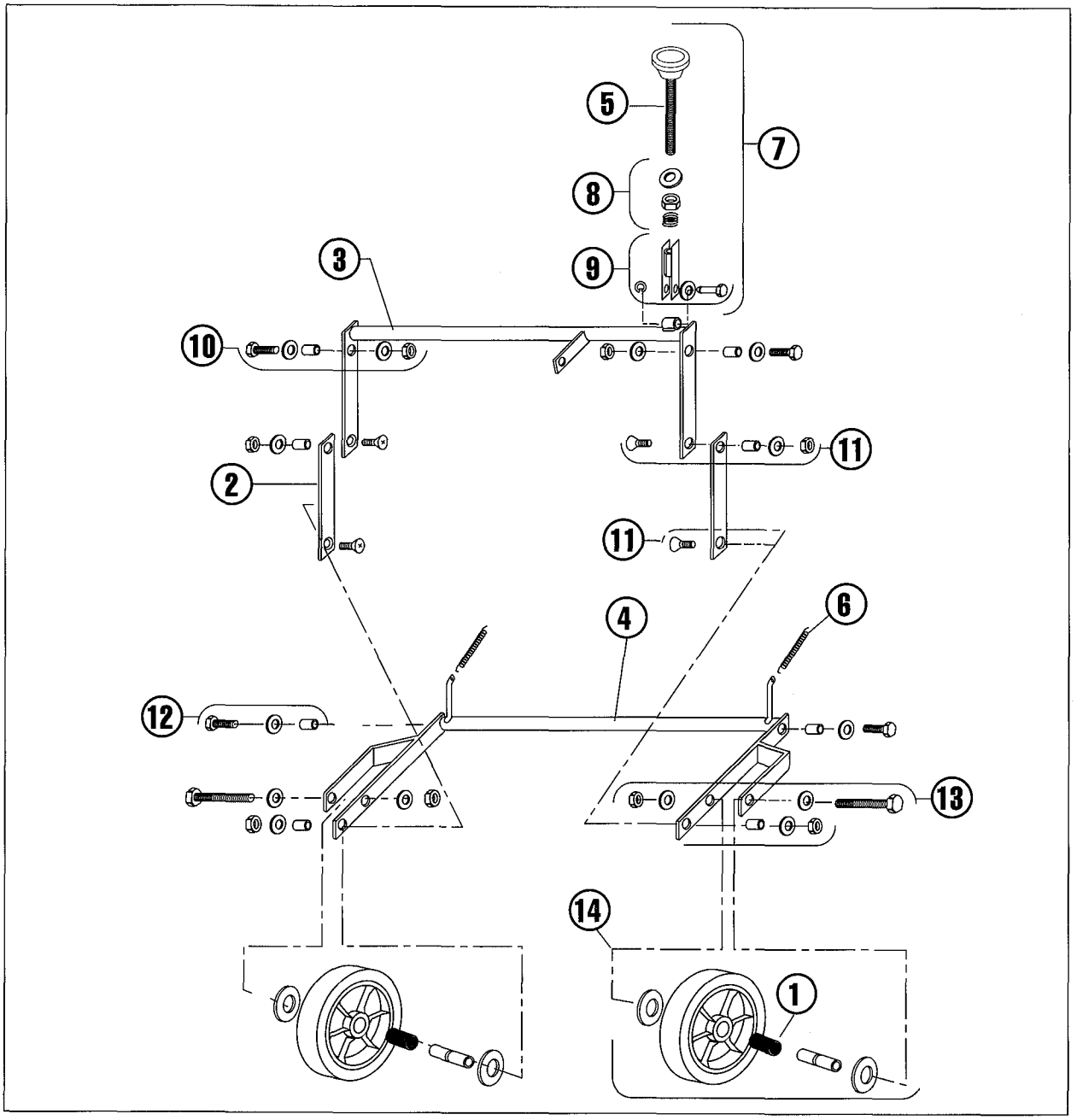
PARTS HANDLE & CONTROL – MODEL 442

Item No.	Part No.	Description	No. Req'd.
1	T0034	Grip, clutch, 1 each	2
2	T5129	Spring, clutch	1
3	T7149	Clutch control, with grips	1
4	T7113	Handle with grips	1
5	T7174	Handle, control, rear wheel	1
6	T7189	Clutch cable	1
7	T7191	Grips, pair	1

Item No.	Part No.	Description	No. Req'd.
8	T7221	Fastener kit, clutch control to handle	1
9	T7222	Clutch cable kit (complete assy. except #T5129)	1
10	T7223	Pin kit, rear wheel control handle	1
11	T7224	Rear wheel control rod kit	1
12	T7117	Fastener kit, handle	1

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number



PARTS REAR WHEEL - MODEL 442

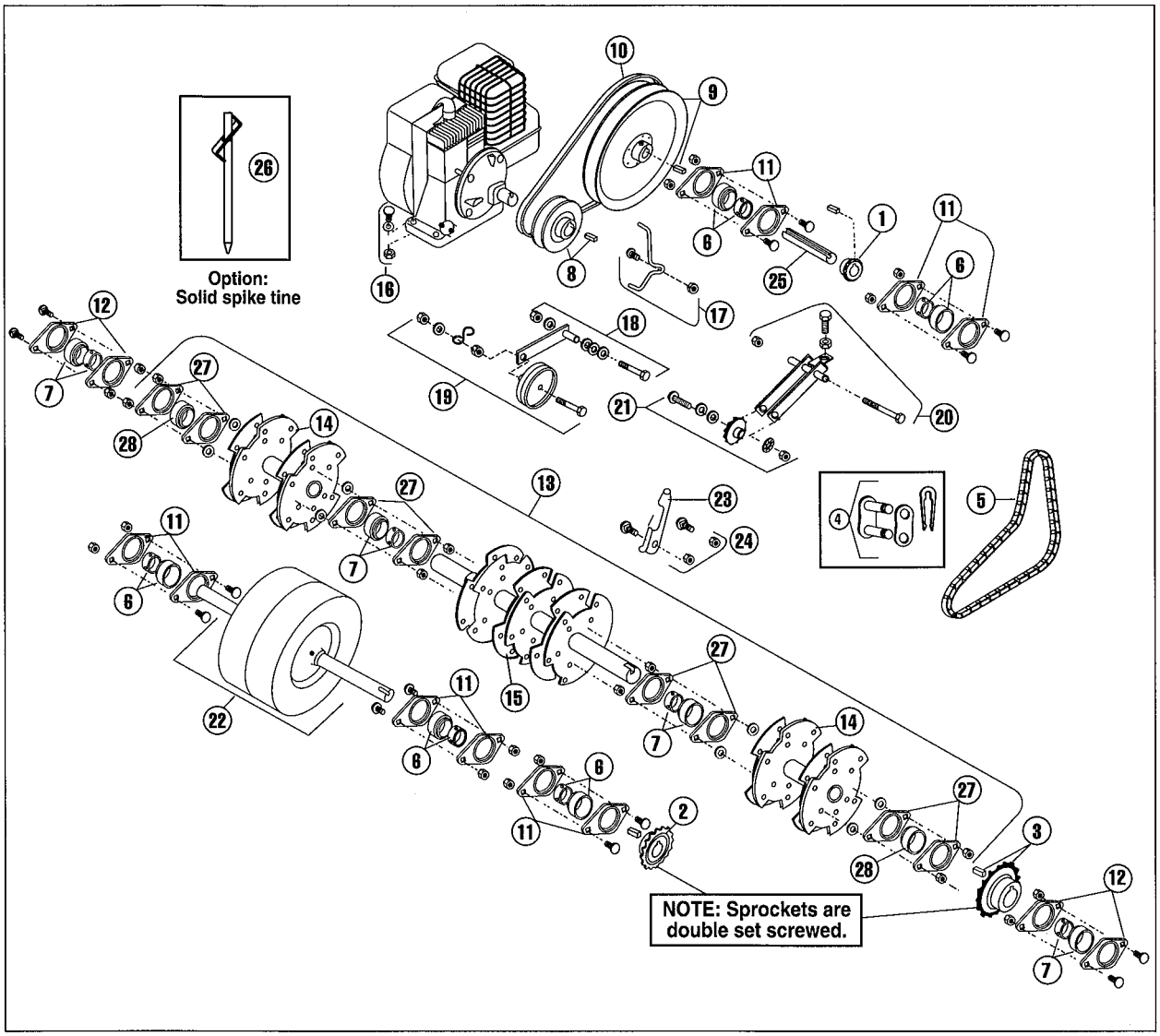
Item No.	Part No.	Description	No. Req'd.
1	T0048	Bearing, roller with bushing and seals	2
2	T7107	Lift link	2
3	T7119	Torque arm, depth adjustment	1
4	T7122	Wheel carriage, axle	1
5	T7163	Knob, depth/stability	1
6	T7195	Spring, axle	2
7	T7213	Control kit, depth/stability	1
8	T7214	Knob spring kit, depth/stability	1

Item No.	Part No.	Description	No. Req'd.
9	T7215	Bracket kit, depth/stability	1
10	T7216	Fastener kit, torque arm/housing	2
11	T7217	Fastener kit, linkage	4
12	T7124	Fastener kit, carriage/housing	2
13	T7219	Bolt kit, rear wheel	2
14	T7220	Wheel kit, rear, with roller bearing, bushing and seals	2

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number

Parts Power Train and Tine Rotor – Model 442



PARTS POWER TRAIN AND TINE ROTOR – MODEL 442

Item No.	Part No.	Description	No. Req'd
1	T0304	Sprocket, jackshaft, with key	1
2	T0305	Sprocket, wheel, with set screws and key	1
3	T0306	Sprocket, rotor, with set screws and key	1
4	T0307	Master link for T0309	1
5	T0309	Chain, #40 perma lube roller	1
6	T0315	Bearing, 3/4" with lock collar	5
7	T0317	Bearing, 1" with lock collar	4
8	T0328	V-pulley, A-4" with set screws and key	1
9	T0332	V-pulley, A-10" with set screws and key	1
10	T0336	V-belt, A-44" special	1
11	T5185	Stamping kit w/fasteners (for 3/4" bearing)	5
12	T5786	Stamping kit w/fasteners (for 1" bearing)	2
13	T7121	Tine rotor shaft assembly, complete	1
14	T7116	Outer rotor plate kit	2
15	T7114	Center tine rotor shaft	1
16	T7204	Fastener kit, engine	1

Item No.	Part No.	Description	No. Req'd
17	T7205	Belt keeper kit	1
18	T7206	Idler arm kit, pulley	1
19	T7207	Idler pulley kit	1
20	T7208	Idler arm kit, chain	1
21	T7209	Idler sprocket kit, chain	1
22	T7120	Front wheel and shaft kit	1
23	T7111	Tine set, closed spoon, 42 each	1
	T7112	Tine set, closed spoon, 6 each	7
24	T7102	Tine/Spike fastener kit, 96 ea. bolts and nuts	1
	T7103	Tine/Spike fastener kit, 12 ea. bolts and nuts	7
25	T7106	Jackshaft, with key	1
26	T7104	Spike set, 42 each	1
27	T7105	Stamping kit (for 1" bearing) with nuts and washers	4
28	T7108	Bearing, 1" (does NOT include lock collar)	2

NOTE: No. Req'd refers to the quantity used in a complete machine.

Please Order by Part Number

Toro Total Coverage Guarantee

A One-Year Limited Warranty
(A Two-Year Full Warranty for Residential Use)

What is Covered By This Express Warranty?

The Toro Company promises to repair any TORO product used for commercial, institutional, or rental purposes if defective in materials or workmanship for a period of one year from the date of purchase. The cost of parts and labor are included, but the customer pays the transportation cost. Transportation within a 15-mile radius of a TORO ProLine Service Dealer is covered under this warranty for Riding Products, Mid-size Mowers and Turf Maintenance Equipment.

What Products Are Covered By This Warranty?

The following products and their attachments are covered by this warranty:

- Z-Master Zero Radius Tractors
- ProLine Mid-size Mowers
- Groundsmaster Riding Mowers
- ProLine Hand-held Gas Products
- Backpack Blowers
- Commercial WPM
- Turf Maintenance Equipment
- Debris Management Equipment

How About Residential Use?

TORO products used for residential use are covered by a full two-year warranty.

How Do You Get Warranty Service?

Should you feel your TORO product contains a defect in materials or workmanship, contact the dealer who sold you the product or any TORO ProLine Service Dealer. The Yellow Pages of your telephone directory is a good reference source; look under TORO Commercial Service Dealers. The Service Dealer will either arrange service at his/her dealership or recommend another authorized Service Dealer who may be more convenient. You may need proof of purchase (copy of registration card, sales receipt, etc.) for warranty validation.

If for any reason you are dissatisfied with a Service Dealer's analysis of the defect in materials or workmanship or if you need a referral to a TORO ProLine Service Dealer, please feel free to contact us at the following address:

Toro Customer Service Department
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
612-888-8801 or 800-348-2424

What Must You Do To Keep The Warranty In Effect?

You must maintain your TORO Product by following the maintenance procedures described in the operator's manual. Such routine maintenance, whether performed by a dealer or by you, is at your own expense.

What Does This Warranty Not Cover?
and
How Does Your State Law Relate To This Warranty?

There is no other express warranty except as described above. This express warranty does not cover:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune-up parts, blade sharpening, brake and clutch adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non-use over three months.
- Pickup and delivery charges for distances beyond a 15-mile radius from a TORO ProLine Service Dealer.

All repairs covered by this warranty must be performed by a TORO Service Dealer using Toro approved replacement parts.

The Toro Company is not liable for indirect or consequential damages in connection with the use of the TORO Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty. Some states do not allow exclusions of incidental or consequential damages, so the above exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries other than the United States or Canada

Customers who have purchased TORO products exported from the United States or Canada should contact their TORO Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the TORO importer. If all other remedies fail, you may contact us at The Toro Company.

Sound - Model 244

L_{wa} 98.3

Sound Test

Sound test conducted was in accordance with 79/113/EEC and was performed on 8 March 95 under the conditions listed.

L_{pA} 87 OPERATOR

General Condition: Partly Cloudy
Temperature: 52°F (11.1°C)
Wind Speed: 10 MPH (16kmh)
Wind Direction: S.W.
Humidity: 36%
Barometric Pressure: 24.9″ Hg (631mm Hg)

Vibration - Model 244

0.1g

Vibration Level 1.75g

Vibration level at the operators handles were measured in the vertical, lateral, and longitudinal directions using calibrated vibration test equipment.

Tests were performed on 8 March 95 under the conditions listed:

General Condition: Partly Cloudy
Temperature: 52°F (11.1°C)
Wind Speed: 10 MPH (16 kmh)
Humidity: 36%
Barometric Pressure: 24.9″ Hg (631mm Hg)

Sound - Model 442

L_{wa}

Sound Test

Sound test conducted was in accordance with N/A and was performed on N/A under the conditions listed.

L_{pA} OPERATOR

General Condition: _____
Temperature: _____
Wind Speed: _____
Wind Direction: _____
Humidity: _____
Barometric Pressure: _____

Vibration - Model 442

Vibration Level 1.75g

Vibration level at the operators handles were measured in the vertical, lateral, and longitudinal directions using calibrated vibration test equipment.

Tests were performed on N/A under the conditions listed:

General Condition: _____
Temperature: _____
Wind Speed: _____
Humidity: _____
Barometric Pressure: _____

For Sales and Service, contact dealer where purchased:

_____

_____

_____

Phone _____

Record Your Purchase:

Model Number: _____

Serial Number: _____

Purchase Date: _____

Engine Model _____

Engine Serial No. _____

_____

_____

_____

TORO

Toro
8111 Lyndale Avenue South
Bloomington, MN 55420-1196 USA
(612) 888-8801
800-348-2424

Form No. 01978137T (Ptd. in USA)